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REMARKS

2 These remarks follow the order of the paragraphs of the office action. Relevant portions of the

3 office action are shown indented and italicized.

DETAILED ACTION 4 Claims 1-23 remain pending in this examination. Claims 15-17, and 21 remain withdrawn as being drawn to a nonelected invention. Applicant is advised to update the 5 claim notations for each set of claims. Claim 23 should read previously presented" and б 7 not "new". 8 Claim Rejections - 35 USC § 101 9 The text of those sections of Title 35, U.S. Code not included in this action can 10 be found in a prior Office action. 11 Claim 14 is not tangibly embodied. Although Applicant is claiming an apparatus, each feature of the apparatus is merely software code as defined in the specification 12 (page 13). Applicant is required to amend this claim such that the software modules are 13 14 embodied on a computer readable medium. See MPEP 2106. 15 In response, applicant respectfully states that claim 14 was amended to embody tangible 16 computing medium. 17 Claim 22 is not tangibly embodied. Although Applicant has amended such that at least one of said means is a tangible means, it does not mean that these 18 means is not embodied on a computer readable medium (i.e. a tangible 19 means could be a piece of paper). See MPEP 2106. Correction or cancellation is 20 21 required 22 In response, applicant respectfully states that claim 22 was amended to embody tangible 23 computing medium. 24

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1 2 3	 Claims 20 and 23 are not tangibly embodied. A computer program product is merely software code, which is not tangibly embodied on a computer readable medium. See MPEP 2106.
4	In response, applicant respectfully states that claim 20 and 23 were amended to embody tangible
5	computing medium.

Claim Rejections - 35 USC § 112

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. 7. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites "the cookie" which lacks antecedent basis. Correction is required.

In response, applicant respectfully states that claim 3 amended to overcome the 35 USC 112 rejection.

Claim Rejections - 35 USC § 102

- 8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. Claims 1-14, and 18-20, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor et al. (USPN 6,728,885).
- 9. Referring to claim 1, Taylor discloses a method comprising differentiating at least one service class in a kernel to perform service differentiation based on content in at least one data packet, including the steps of: capturing at least one data packet until a complete application header is detected (an inherent feature of capturing a packet at a NIC as disclosed in Taylor is that an application header is also captured) (col. 5, lines 30-32); parsing said complete application header to determine at least one application tag (i.e. attribute information such as source and destination address which are contained in the application header) (col. 6, line 15-17); matching said at least one application tag to at least one matching rule (col. 6, lines 32-37); determining a presence of at least one match with said at least one matching rule (i.e. checking the relevant information on the SYN packet sent by DPF 207) (col. 6, lines 32-37; col. 10, line 57 to col. 11, line 10); and performing service differentiation (i.e. discarding packet if determined not to allow connection or creating a new connection and applying the corresponding rule to any subsequent packets from that connection until the connection s disconnected) (col. 6, lines 61-65).

- In response, applicant respectfully states that Taylor performs the above steps not to perform service differentiation but to provide security to the system thus the only action they describe is 1 shown in figure 4 item 315 and claim 6, discarding the first packet if the connection is not 2 approved, a security action. The Freimuth et al patent provides methods and performs operations 3 on packets for the purpose of providing different performance levels in the system based on 4 5 service classes. This is shown by the rule table in figure 5 that shows multiple actions to 6 prioritize, schedule, rate control, monitor and drop packets to provide better performance to 7 higher class services. For example figure 406 describes placing connection requests in the accept 8 queue in a prioritized order so that packets from higher priority service classes are serviced first. 9 The background of the invention mentions a preferred gold class of service, this gets to the intent 10 of providing service differentiation for example in a system with gold, silver and bronze classes 11 of service. 12
- Claim 1 is amended to more specifically show that it is directed, "to provide different levels of service for system performance to users perform service differentiation based on content in at least one data packet." Thus claim 1 and all claims that depend upon it are certainly allowable.
- 10. Referring to claim 2, Taylor discloses the application tag includes a request method (Le. filter to all "telnet" packets) (col. 6, lines 28-30).
- In response, applicant respectfully states that claim 2 claims gives details about rules for web applications and how different levels of service can be provided like preferred gold, silver, bronze for a web user. Taylor is filtering for security purposes and this is not claim 2. Thus claim 2 is allowable.
- 22 11. Referring to claim 3, it is an inherent feature in HTTP that the URI is the 23 second string in the HTTP header, (the first string is the action word, such as GET 24 POST HEAD SYN, etc.).
- In response, applicant respectfully states that claim 3 as amended serves the purpose of claim differentiation to broaden claim 1 upon which it depends. Thus claim 3 is allowable.

1 2	12. Referring to claim 4, Taylor discloses employing a table having at least one matching rule (col. 6, lines 53-57).
_	In response, applicant respectfully states that the table used for matching in claim 4 is employed
3	to determine a level of service of claim 1. Thus claim 4 is allowable.
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5 6	13. Referring to claim 5, Taylor discloses finding a best match (i.e. a rule which best fits the packet, such as the type of protocol used) (col. 6, lines 25-43).
7	In response, applicant respectfully states that the matching of claim 5 is employed to determine a
8	level of service of claim 1. Thus claim 5 is allowable.
9 10	14. Referring to claim 6, Taylor discloses service differentiation includes dropping (i.e. discarding a packet) (col. 6, lines 61-65).
11	In response, applicant respectfully states that the actions of claim 6 refer to provisioning level of
12	service of claim 1. Thus claim 6 is allowable.
13 14	15. Referring to claim 7, Taylor discloses dropping includes discarding a connection (i.e. do not allow a connection) (col. 6, lines 61-65).
15	In response, applicant respectfully states that the actions of claim 7 refer to provisioning level of
16	service of claim 1. Thus claim 7 is allowable.
17 18	16. Referring to claim 8, Taylor discloses said action includes protocol control (i.e. setting up a new connection (col. 6, lines 61-65).
19	In response, applicant respectfully states that the actions of claim 8 refer to provisioning level of
20	service of claim 1. Thus claim 8 is allowable.
21 22	17. Referring to claim 9, Taylor discloses installing at least one matching rule (col. 6,
23	In response, applicant respectfully states that the actions of claim 9 refer to provisioning level of
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1 2	18. Referring to claims 10 and 11, Taylor discloses detecting establishment of a new TCP connection (col. 6, line 60 to col. 7, line 10).
3	In response, applicant respectfully states that the actions of claims 10 and 11 refer to provisioning level of service of claim 1. Thus claims 10 and 11 are allowable.
5 6 7 8 9 10	19. Referring to claim 12, Taylor discloses the step of establishing a new TCP connection includes receiving a SYN packet, sending a SYN-ACK packet, deferring accept, receiving ACK for SYN-ACK and deferring notification of data packet (this is an inherent feature of the HTTP basic 3-way handshake for Connection synchronization which can be found in the <u>Transmission Control Protocol DARPA Internet program</u> Protocol Specification September 1981 prepared by Information Sciences Institute, USC, page. 31 Figure 7) (col. 5, lines 55-60).
12	In response, applicant respectfully states that the actions of claim 12 refer to provisioning level of
13	and a following 1. Thus claim 12 is allowable.
14 15 16	20. Referring to claim 13, detecting application header delimiters for said data packet is an inherent feature of Taylor since without this detection step, the system would not know where the header starts and ends.
17	In response, applicant respectfully states that the actions of claim 13 refer to provisioning level of
18	service of claim 1. Thus claim 13 is allowable.
19 20	21. Claims 14, and 18-20, 22, and 23 are rejected for similar reasons as stated above.
21 22 23 24	In response, applicant respectfully states that claim 14 is amended to more specifically show that it is directed, "to provide different levels of service for system performance to users perform service differentiation based on content in at least one data packet." Thus claim 14 and all claims that depend upon it are certainly allowable.

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12

- It is anticipated that this amendment brings the application to allowance of claims 1-14 and
- 2 18-20, 22, and 23 and favorable action is respectfully solicited.
- 3 Please charge any fee necessary to enter this paper to deposit account 50-0510.

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